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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,485	01/23/2004	Win-Chee Yu	TAIW 211	4929
7590 RABIN & BERDO, P.C. Suite 500 1101 14 Street, N.W. Washington, DC 20005			EXAMINER FANTU, YALKEW	
			ART UNIT	PAPER NUMBER
			2838	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/01/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

10/762,485

Applicant(s)

YU ET AL.

Examiner

Yalkew Fantu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2007 and 03 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action replaces the previous final of 11/3/2006 in its entirety, due to the newly found art. The previous indication of allowable subject matter is withdrawn. Thus, the newly submitted after-final amendments of 2/2/2007 are not entered.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sabo (US 6,803,744) in view of Daniel W. Hart (Prentice Hall, Upper Saddle River, New Jersey; ISBN 0-02-351182-6).

With respect to claims 1 and 6, Sabo discloses integrated induction battery charge apparatus having a charge end to generate induction magnetic field to charge a plurality of induction charge batteries (fig. 1), comprising: a power supply (fig. 1, 10) to provide electric energy; a detection module (col. 1, lines 35-45) located on the charge end to detect the charge battery (col. 3, lines 24-25) and to generate a start signal when the charge battery is detected; an activation module connected to the detection module for receiving the start signal and turning on a power supply (fig. 1, 12; col. 3, line 13); a first induction module (16) connected to the activation module (12) for transforming electric energy provided by the power supply (10) to magnetic energy through electromagnetic induction (col. 2, lines 45-60); a plurality of second induction modules

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(fig. 1, 16 and 20) located with a plurality of relative charge batteries (fig. 1, batteries in 20 and 16) in an integrated manner wherein the second induction modules (fig. 7, 106) transform an induction magnetic field generated by the first induction module (fig. 7, 108) to induction voltage, the second induction modules including different relative induction coils with different numbers of turns set individually (fig. 7, 106 is different from 108) according to a required charge voltage of various charge batteries so that induction voltages meeting requirements of various charge batteries are generated (col. 2, lines 45-50), whereby one charge dock can charge multiple batteries at various required voltages (col. 7, lines 45-50) according to battery specifications (fig. 7, 112 and 120; fig. 8, 206 and 212 show different number of turns, which is capable of charging at various voltages); a rectification module connected to the second induction modules for rectifying AC voltages generated by the second induction modules by induction to become DC voltages wherein the rectification module can include a bridge rectifier (col. 4, lines 59-61; col. 5, lines 64-67) ; and the system is explicitly have a filter, but does not expressly disclose a filter module connected to the rectification module includes at least one inductor and at least one capacitor coupled in parallel. Hart, however, discloses a filter module includes at least one inductor and at least one capacitor coupled in parallel (see fig. 4.18); the reason for doing so as noted at page 141 at Hart, would have been that it improves the wave form of the voltage outputs from the rectification module by eliminating higher order harmonics from the input (which help the output).

Regarding claim 2, combined references of Sabo and Hart disclose an integrated induction battery charge apparatus of claim 1. In addition, Sabo disclose that the first induction module includes an induction coil (see figs. 7 and 8, 114 and 212).

With respects to claim 3 and 4, combined references of Sabo and Hart disclose an integrated induction battery charge apparatus, besides, Sabo disclose that the detection module detects through electromagnetic induction (col. 5, lines 19-22); and the detection module detects through piezoelectric induction (col. 5, lines 22-23 and col. 6, lines 46-49).

With respect to claim 5, Sabo discloses that wherein the activation module includes metal oxide semiconductor switches (col. 5, lines 16-18).

Alternatively, claims 1, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sabo (US 6,803,744) in view of Hulman (US 5,367,242) and Daniel W. Hart (Prentice Hall, Upper Saddle River, New Jersey; ISBN 0-02-351182-6).

With respect to claims 1, 6, 7 and 8, Sabo discloses integrated induction battery charge apparatus having a charge end to generate induction magnetic field to charge a plurality of induction charge batteries (fig. 1), comprising: a power supply (fig. 1, 10) to provide electric energy; an activation module connected to the detection module for receiving the start signal and turning on a power supply (fig. 1, 12; col. 3, line 13); a first induction module (16) connected to the activation module (12) for transforming electric energy provided by the power supply (10) to magnetic energy through electromagnetic induction (col. 2, lines 45-60); a plurality of second induction modules (fig. 1, 16 and 20) located with a plurality of relative charge batteries (fig. 1, batteries in 20 and 16) in an

integrated manner wherein the second induction modules (fig. 7, 106) transform an induction magnetic field generated by the first induction module (fig. 7, 108) to induction voltage, the second induction modules including different relative induction coils with different numbers of turns set individually (fig. 7, 106 is different from 108) according to a required charge voltage of various charge batteries so that induction voltages meeting requirements of various charge batteries are generated (col. 2, lines 45-50), whereby one charge dock can charge multiple batteries at various required voltages (col. 7, lines 45-50) according to battery specifications (fig. 7, 112 and 120; fig. 8, 206 and 212 show different number of turns, which is capable of charging at various voltages); a rectification module connected to the second induction modules for rectifying AC voltages generated by the second induction modules by induction to become DC voltages wherein the rectification module can include a bridge rectifier (col. 4, lines 59-61; col. 5, lines 64-67) ; and the system is explicitly have a filter, but does not expressly discloses a filter module connected to the rectification module.

Hulman however discloses, a rectification and a filter module (fig. 1, 10). Besides, Hulman also discloses detection circuit (fig. 1, 8 and 18) to detect the charge battery in order to charge the rechargeable battery. Hulman does not explicitly teach the LC circuit. On the other hand, Hart discloses that a filter module includes at least one inductor and at least one capacitor coupled in parallel (see fig. 4.18) showing that such filters are known (claims 7 and 8).

Sabo and Hulman are analogous arts because they are from the same field of endeavor namely inductive power transfer system and charging a rechargeable battery.

At the time of the invention it would have been obvious to a person having ordinary skill in the art to provide a filter module and a detection module as taught by Hulman to the inductive power transfer of system of Sabo to ensure a rechargeable battery detection to charge the battery and a filter module to improve the output voltage before it is used for charging purpose.

With respect to claims 11 and 12, Hulman discloses that the battery of claim 6, wherein the rectification module is a bridge rectifier (Fig. 3 element 30)(claim 11); and a battery of a portable information process apparatus (Fig. 1 element 2) (claim 12).

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sabo (US 6,803,744) in view of Hulman (US 5,367,242) and Daniel W. Hart as applied to claims 1 and 6 above, and further in view of Kuennen et al (US 6,825,620).

Regarding claim 13 the battery of claim 6 is disclosed in the above combined references, but do not disclose a mobile communication apparatus. Kuennen, on the other hand, discloses the battery of a mobile communication apparatus (Col. 4 lines 64-68).

Sabo, Hulman, Hart and Kuennen et al are analogous art because they are from the same field of endeavor namely inductive battery charging apparatus.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art, to have added a mobile communication apparatus to the induction battery apparatus in view of the teachings of Kuennen et al to use the battery charged by inductive charging to power the mobile communication apparatus, such as a cell phone, in a wireless environment.

***Response to Arguments***

Applicant's arguments with respect to claims 1-8 and 11-13 have been considered but are moot in view of the new ground(s) of rejection (See the rejection above). Final necessitated by amendment.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yalkew Fantu whose telephone number is 571-272-8928. The examiner can normally be reached on M - F: 7- 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl D. Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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